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ABSTRACT

The role of an occupational therapist (C.T.) in the education of emotionally disturbed children is examined. The reurological involvement of many exctionally disturbed children is linked to abnormal responses from sensory input and distortion or disorganization of perception. Possible explanations for differences tetween emcticnally disturbed and learning disabled children are cited. The O.T. is seen to be capable of translating the child's behavior in view of neurological deficits and of remediating the senscrinctor difficulties. (CI)

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Teachers and Occupational Therapists:

A Partnership for Children with Special Needs

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The Role of the Therapist with Emotionally Disturbed Children

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Emotionally disturbed children are a particular problem for us. Unlike the retarded, with their obvious learning limitations, or the physically handicapped, with their visible dysfunction, disturbed children do not present any easily agreed upon sign of their condition. The determination of who falls in this particular category is often made by different criteria, depending on who is describing the child: the classroom teacher, who lives with the child's behavior; the psychologist who is administering projective and cognitive tests in an office; or the neighbors, who are tired of the child's intrusions. Furthermore, disturbances of behavior are characteristic of children with a variety of other developmental or physical deficits and arguments about which represents the primary concern are common. Though intellectually such an argument may appear a needless aplitting of an indivisible whole-the child- nevertheless decisions such as program placement and priority of provision of services must reflect some such discussion.

Thus, almost by definition, the emotionally disturbed include a great variety of children, whose <u>single</u> common characteristic is that a number of people have agreed that behavior disturbances are a priority problem. Depending on the setting, this group may include those labelled autistic and schizophrenic, as well as children who are severely agressive, self-destructive, severely withdrawn, bizarre, depressed, or otherwise in trouble.

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Even when a group of concerned adults has agreed that a child is disturbed there may still be significant disagreements about the <u>origin</u> of the problem and, therefore, about the type of services needed to remedy the problem. Thus, for instance, there may be disagreements about referral for psychotherapy vs. referral for parent training in behavior management. In our concern about the <u>effects</u> of the behavior problems, also, we may tend to overlook or minimize other contributing factors which could help our understanding of the child, and it is this area I would like to address today.

The research and descriptive literature on emotionally disturbed children has contained evidence for many years that at least a portion of these children manifest signs of neurologic dysfunction. Among the signs mentionned repeatedly are unusual sensitivity to various sensory stimuli (auditory, visual, tactile); postural immaturity, with related primitive reflex patterns, and disturbances in reactions to vestibular stimulation (that is, to movement). While initial reports concentrated on the most disturbed population (autistic and schizophrenic), later research has found similar sensori-motor deficits in a proportion of better functionning, although still disturbed, children.

At the same time, similar findings have been researched in the adult psychiatric population, yielding a variety of theories linking the neurologic signs with specific behavior disturbances. As yet, no truly comprehensive explanation has been presented -which in part reflects the limitations of our knowledge about the brain- however there appears to be increasing agreement that emotional disturbance in certain children and adults is an outcome of some disturbance in central nervous system functions, with particular focus on those systems regulating sensory processing (both external and internal), regulation of arousal and attention, and planning of complex movement. As you have heard from the previous speakers, these are areas to which the occupational therapist brings a particular expertise.



What behavior characteristics identify the children who may be experiencing one or more of the above difficulties, that is, those whose emotional disturbance may be more of a reflection of central nervous system dysfunction than of environmental or interpersonal stress?

Often the first clue is their physical appearance: they may look "o. .

They may toe-walk or walk with a wide-based, toddler-like gait. When r 'their arms may go up to either side and from a distance they may have an . usually symmetrical appearance. They may be unable to run at a jogging pace, but have to lunge forward. These are all clues to one of the most frequently encountered areas of difficulty: that of postural integration, the development of that stable background that provides the support for refined movement. Generally, when looked at closely, these children lack the adjustments necessary for equilibrium: on balance equipment they cling or fall over, panic or refuse to attempt any movement testing their balance. The anxiety that such insecurity must arouse is easily imagined, and, if experienced since infancy, one can also easily imagine that the world may not be perceived as a supportive place. In a most fundamental way, these children are "out of control".

Many of these children, when specifically tested, are shown not to have a normal response to the sensory input coming from movement -that is, to vestibular input. Behaviorally, one may find that these same children who are terrified of a balance beam may love the roller coaster or may rock themselves furiously on a rocking horse, or may spin themselves on the swings without seeming to get dizzy. They are, in my opinion, seeking out the sensory input that they need in great quantity because their nervous system doesn't organize it in normal situations.

The vestibular system appears to have particularly wide-ranging impact on the brain. As is obvious, one must perceive movement accurately to keep one's balance. However, there are other, less-obvious connections which are of



particular relevance to the emotionally disturbed. One of these is vision. Control of eye movements is, necessarily, linked to control of whole body movement and posture, since the two must work together to provide stable visual images as one changes position. Many of the children I see, however, do not show this smooth coordination -they are variously described as having poor eye contact, trouble maintaining focus, not looking where they are going, etc. Though this problem, of course, involves multiple factors, it has been of great interest to me that in working with these children it is often during vestibular activities, e.g. in a tire swing, that I am most able to elicit good eye contact and, after that, the first visual tracking. Again, consider the impact on one's development if visual stability is disturbed during movement or if one cannot reliably determine whether it is oneself or the outside world which is in motion.

Not only may visual stability be affected but the child's perceptions in general may also show disorganization or distortion. They may, literally, not be able to figure out "where they are in space" and may rely on memorizing the numbers on the doors or perseveratively repeating the sequences of events in the day to create order for themselves. If a familiar object is out of place or in another orientation, they may not recognize it. These children are often subject to panic when their environment is disturbed: it is as if, suddenly, the things they are attached to are lost or they themselves are trapped in a space they cannot negotiate. Particularly where the child in question cannot communicate effectively with language, it may be next to impossible for him or her to let any concerned adult know what is wrong and his behavior will appear irrational. An example of this confusion was recently provided by a six-year-old child who, when he recently acquired language, told his mother one day: "One time when I was little we were in the backyard and you took off my diaper and threw it away. Then you took off my shoes and I thought you were going to throw



them away too, and I screamed and yelled." To the papent this was one of a long series of frustrating, incomprehensible tantrums. For the child it was a vivid image which he could not organize and resolve for many years.

Emotional stability implies, among other things, the ability to maintain's reasonable controls on one's reactions to outside stresses, as reflected in the colloquial phrases "a stable person" or "unbalanced". On a neurologic level, this implies the ability of the central nervous system to discriminate degrees of importance of incoming stimuli and to program a response appropriately gauged in intensity and type of activity. Many emotionally disturbed children fail at this task, not only in obviously emotionally-laden situations (e.g. having a limit set) but also with physical experiences. They "over-react" (e.g. go to pieces if you touch their head) or "under-react" (e.g. seem not to notice when they get bumped). They may have extreme reactions to particular noises (e.g. love a particular piece of music, hate a particular child's voice) and have seemingly idiosyncratic aversions to certain clothing or foods. Once excited they cannot seem to calm themselves, except perhaps by hiding themselves in a small confined space. Often, beneath these outward behaviors is a sensory processingproblem, frequently in the tactile area. These children, far from perceiving a light pat or an arm around the shoulder as reassuring, soothing experiences, react with a primitive arousal and experience of threat which overrides their nervous system's capacity to discriminate the stimuli and react to the specific situation. The response is diffuse and, if the particular situation continues, approaches disorganization, especially in the young child. Usually, even in a calm situation, these children are not able to perceive accurately the location of a touch on their body or to determine from an object's confours its shape and familiarity or strangeness. The implications of such dysfunction are two-fold: one, the imbalance of arousal leaves the child open to repeated experiences of disorganization



and disruption from ordinary activities; two, the diffuse tactile reactions leave an imprecise sense of body boundaries (i.e. of self and non-self) and lead to incomplete or distorted learning from environmental experiences.

So far we have touched on a number of areas of dysfunction all of which are intimately related to movement organization and regulation. Not surprisingly, many disturbed children show disturbances in movement. However, these may not always show up as disturbances in those familiar areas of assessment: throwing and catching, jumping, copying forms, etc. so they are often missed. children may show fine control of specific skills but be completely unable to vary that particular movement sequence or to adjust if one alters the situation slightly. This might show up behaviorally as "he never tries anything new on his own" or "everytime I tried to teach him the new ball game, he kept doing the old one." Here, the difficulty is in the planning of unfamiliar motor sequences or of executing a movement on command ( as opposed to moving spontaneously). In an extreme form, one may see children who can jump easily on the playground but cannot jump on your count of 3. Here again, the implications for the development of one's image as autonomous and competent individual are fairly clear. Other disturbances of movement often seen include those encountered in the learning disabled: difficulty integrating the two sides of the body, disregard of one side of the body, or poor modulation of fine movement.

An obvious question at this point is what differentiates these children from learning d'sabled children with whom they may share any and all of the described sensori-motor problems. The answer, though incomplete, seems to be that for some reason these children's deficits have had a more far-reaching impact on their affective (emotional) and personality development, and seem to have overwhelmed the individual's capacity to grow in a fairly typical way, in spite of adversity. I don't think we know enough yet to be precise about how this happened, although we can certainly identify a number of possibilities, including:



- 1. The deficits may specifically have affected the portions of the central nervous system involved in emotional regulation. Some of the research of autism has particularly suggested the possibility of deficits in parts of the system which provide the emotional "color" to experiences and, thus, are involved in attachment to persons as well as motivation for exploration and mastery.

  Research with adults has suggested to some that each hemisphere may be particularly specialized for particular types of affect, thus deficit or irregular development in that hemisphere or the connections between hemispheres may affect one's perception (or emotional experience) of formative life events.
- 2. A second possibility is that the particular combination or severity of deficits was overwhelming. This has been the case with several preschoolers I have treated whose behavior was quite disturbed. When evaluation revealed severe perceptual handicaps, it became clear that much of the behavior was a direct reaction to overwhelming stress caused by everyday experiences.
- 3. A third possibility is that the child's environment was unable to assist the child in compensating or adapting to the effects of the dysfunction. The child's cues may have been too garbled for the parent to interpret accurately or the child needed more of certain experiences but had no way to communicate his needs. Alternatively the home or community environment may have been too stressful or too inconsistent to enable an already "at risk" or vulnerable child to develop adequate coping mechanisms.

Of course, some degree of all of these situations may be present in some children.

Recognition of the <u>emotional</u> component in the child's problem, irrespective of its similarities with other learning deficits, is extremely important for treatment. While the sensory-motor or perceptual aspects of the child's problem can be approached through the remedial methods described by the previous speakers,



additional attention must be paid to the impact of the child's emotional distress and distorted relationships on the remedial process.

In dealing with these disturbed children, often one of the most useful roles of the occupational therapist is the "translation" of the child's behavior in light of the identified deficits. For example, identifying the types of stimuli which lead to over-reaction can help make sense of seemingly "unprovoked" outbursts and help plan effectively to minimize such situations. This translation is essential because only as the child's behavior begins to make sense to us are we able to set more reasonable expectations and to help the child to begin perceiving us as trustworthy and helpful rather than as additional threats to his fragmentary self-control. With older children, in fact, it is often helpful to involve them in planning necessary adaptations such as a quiet space, letting them know you are sympathetic to their distress and are going to assist them in managing the problem.

Beyond such immediate classroom intervention provision of direct remedial work on the identified deficits is particularly of concern with these children. Their amotional connections with other people as well as to the non-human environment have been distorted and are generally distressing rather than growth-enhancing, thus their over-all functionning is threatened. They are desperately in need of experiences that enable them to acquire control over the most basic bodily activities such as balance and movement and to develop more reliable inner organization. In their occupational therapy sessions they can, hopefully, discover that the sensory experiences of touch, movement, and vision can be pleasant rather than frightening and they can begin to define a sense of themselves as separate from their environment and as competent to learn and master new activities.

Most of this presentation has focused on a particular group of disturbed children -those with sensori-motor deficits. However, I would also like to speak

briefly about the role of the occupational therapist with that group of children whose disturbance appears more to reflect disturbances in interpersonal relationships and whose behavioral problems reflect issues with self-esteem and manage ment of impulses. These children often have severe difficulty participating successfully in academic and social activities which call for sustained focus, negotiation of shared materials, space and attention, and regulation of activity sequence and intensity. They often need a remedial experience where they can acquire, small step by small step, the developmental skills essential for these processes. The occupational therapist, possessing skills in activity analysis and developmental assessment, can be a valuable resource in helping design an activity program which can capitalize on each child's strengths and work in graded steps toward the age-appropriate social and emotional goals. A small group designed in this manner can provide an important support to a classroom program. An example is a group of four six-year-old boys I am currently running. Using primarily motor activities we have sought, through the structure and choice of activities, to provide experiences of mastery, self-control and cooperation which translate readily into their daily classroom experiences. An obstacle course, for instance, demands attention to sequence, careful control on the high balance board, and attention to the location of one's peer who is one step ahead. While none of these activities may be unfamiliar to the regular classroom program, the particular needs and problems of these children often require that the experiences be particularly structured to enable the children to be successful and it is in this planning that the occupational therapist can be especially helpful.

While occupational therapy has most frequently been identified as a service for the physically or mentally handicapped, he potential contribution of the profession to programs for emotionally disturbed children is just beginning to

be recognized in many systems. I hope that this very brief overview has helped clarify the contribution that occupational therapy can make in the education of these often puzzling and frustrating children.

## References

Bemporad, J. "Adult Recollections of a Formerly Autistic Child". J. Autism Dev. Dis. 9(2), 179-197, 1979

Bender, L. "Schizophrenia in Childhood-Its Recognition, Description and Treatment". Am. J. Ortho. 26: 499-506, 1956

Bergman, P. & Escalona, S. "Unusual Sensitivities in Very Young Children". Psychoan. Study Child 3-4: 333-352, 1949

Betz, B. "Some Neurophysiological Aspects of Individual Behavior". Am. J. Psych. 136(10): 1251-1256, 1979

Eisenberg, L. "Psychiatric Implications of Brain Damage in Children".

Psychia. Qly. 31(1): 72-92, 1957

Fish, B. et al "The Prediction of Schizophrenia in Infancy: A 10-year Follow-up Report of Neurological and Psychological Development". Am. J. Psych. 121(8): 768-7 1965

Galin, D. "Implications for Psychiatry of Left and Right Cerebral Specialization"...
Arch Cen Psy31: 572-583, 1974

Kandal. E. "Psychotherapy and the Single Synapse" .- NEJM 301(19):1028-1037, 1979

Morrison, D., Pothier, P. & Horr, K. Sensory-Motor Dysfunction and Therapy in Infancy and Early Childhood. Springfield: Chas. Thomas, 1978

Ornitz, E. "Vestibular Dysfunction in Schizophrenia and Childhood Autism". Comp. Psy. 11:158-173, 1970

Piggott, L. et al. "Vestibular Dysfunction in Emotionally Disturbed Children". Biol. Psy. 11: 719-729, 1976

Scardina, G. "Identifying Characteristics of Children with Dysfunction of the Left Side of the Body". AJOT 28: 478-483, 1974

Schilder, P. The Image and Appearance of the Human Body N.Y.: Int. Univ. Press, Inc., 1950.

Silberzahn, M. "Sensory Integrative Function in a Child Guidance Clinic". AJOT 29(1): 28-34, 1975

Silver, A. "The Association of Schizophrenia in Childhood with Primitive Postural Responses and Decreased Muscle Tone". <u>Dev. Med. Child Neur.</u>6: 495-497. 1964

